

Alphabetic scripts and other forms of literacy in Post-Harappan India: A logical assessment and inquiry as to the origin and extent of literacy in Post-Harappan India

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Abstract

This paper brings together all available evidence for literacy in Post-Harappan India, still popularly known as Iron age Vedic India, most of which have been endorsed by mainstream researchers in some way or the other in the recent past and brings into attention the need to revise all earlier models dealing with literacy in Post-Harappan India to bring them in line with latest acculturation models and mainstream models of the development of alphabetic scripts. More importantly we refute the thesis that the Archaemenids introduced the alphabetic script into India. This theory has always been controversial and has been challenged by several mainstream researchers, both Western and Indian, for several decades. It is hopelessly antiquated now and a complete non-starter when all recent evidence and data is taken into account and no mainstream researcher will even be able to consider such a theory in view of the evidence, reasoning, logic and views of other scholars presented in the paper. The theory that Brahmi was a derivative of the earlier Aramaic script has been somewhat more popular, though still controversial, and we refute this theory as well. We also explain why updating theories based on latest research can have a bearing on research on alphabetic systems in general. All conclusions reached in this paper are presented using a figure-it-out-for-yourself approach and only the views of mainstream researchers are presented. Readers are strongly advised to exercise their own judgment as usual.

Introduction

In a previous paper, we presented a very detailed solution for the Aryan problem and this was published in two parts in the ICAI Journal of history and Culture the first part in January 2009 and the second part in January 2010¹. In this paper we use this work as a template to research the origin of alphabetic scripts in India and show why all existing theories pertaining to the introduction of alphabetic scripts in India are obsolete and need revision. Such obsolete theories only keep on throwing up a series of paradoxes, and even conflict with the more recent research on history of the development of writing systems and alphabets elsewhere. Although few will consider India to be the originating point of alphabetic systems, we also explain why research on the history of alphabets in India can have a bearing on the history of alphabetic systems in general and explain why a multi-disciplinary, multi-region approach can help us push the boundaries of knowledge further.

As usual, the following methodology is adopted

1. We use a figure-it-out-for-yourself approach such that readers can draw their own conclusions.
2. Only views of mainstream scholars are presented.
3. All the latest findings in related fields are taken into account and readers can judge for themselves whether the conclusions reached in the paper make sense or not.
4. We also explain why this issue needs to be revisited in the light of recent research in relevant fields.
5. Readers are strongly urged to question each and every finding presented in the paper and evaluate for themselves whether all findings make sense from all angles. This is necessary for the process of consensus-building.

A brief overview of Brahmi

Brahmi, which can be defined as an abugida or alphasyllabary as opposed to alphabets like English and abjads, is believed to have been the mother of all alphabetic scripts in India and several parts of South East Asia and most scholars think was used to write the early dialects of Prakrit, Pali as well as other languages of India.^{2 3 4} We do not know whether it was used to write Prakrits or Sanskrit first and even whether Sanskrit was written at all, although a discussion of this particular issue will be made in a later part of this paper. It was primarily used on inscriptions and to perhaps to write liturgical texts too. Brahmi spread to most parts of India even before the dawn of the Christian era morphing into many variants. The earliest known and most famous of the early Brahmi inscriptions were Asokan inscriptions which were deciphered by James Princep in the 1830's.⁵

There is no scholarly consensus on the origin of the Brahmi script yet. The earliest view, and one that was widespread until fairly recently, originated from Albrecht Weber and Georg Buhler's "On the

1 Syncretism and Acculturation in Ancient India Parts One and Two Mandavilli, Sujay Rao, ICAI Journal of History and Culture January 2009 and January 2010

2 Salomon, Richard (1998), *Indian Epigraphy: A Guide to the Study of Inscriptions in Sanskrit, Prakrit, and the Other Indo-Aryan Languages*, Oxford: Oxford University Press, pp 12-13

3 Daniels & Bright, *The World's Writing Systems*, Oxford University Press, 1996, ISBN-10: 0195079930

4 Ram Sharma, *Brāhmī Script: Development in North-Western India and Central Asia*, 2002

5 Firminger, Walter Kelly (1906). *Thacker's Guide to Calcutta* (Original from the University of California, Digitized Nov 26, 2007 ed.). Calcutta: Thacker, Spink & Co.. pp. 36..

origin of the Brahmi alphabet”⁶, and derives Brahmi from the Aramaic script, which by all accounts was the ancestor of the contemporary Kharoshthi alphabet that was used in a part of northwest India after it came under the control of the Archaemenid Empire. However, the Aramaic hypothesis has never been conclusive, and continues to be debated very hotly both in India and elsewhere. Some scholars, such as F. Raymond Allchin, John Marshall, Alexander Cunningham and the Assyriologist Professor S. Langdon have considered Brahmi as an indigenous development, with the Bronze Age Indus script as its predecessor. Other Indian scholars such as S.R Rao have also supported this hypothesis.

The different theories on the origin of Brahmi can thus be summarized as follows:

- (a) Brahmi was derived from Kharoshthi and Alphabetic scripts were introduced to India in the Post-Harappan period during the period of the Archaemenid empire
- (b) Brahmi was purely indigenous in origin and was developed independently
- (c) Brahmi was indigenous and derived from the Indus script
- (d) Brahmi was of an earlier Semitic origin

We will evaluate these theories in detail, and show why the first hypothesis cannot even be a contender at this very late date where theories pertaining to the origin of alphabetic scripts and acculturation models have changed radically. Even a superficial and cursory observation of these scripts can allow this hypothesis to be refuted convincingly and readers must exercise their own judgment as usual. We will also show that scenario (b) and (c), though certainly possible, are unlikely and anyone supporting these hypotheses must provide very clear evidence in their support, and invoking Occam's razor, they may not be the most logical choice at all.

Kharoshthi

The Kharoshthi script⁷ is an ancient alphabetic script used in the North-Western part of India from the middle of the 3rd century BC till the 3rd century AD. There has been no consensus on the origin of the Kharoshthi script till date. It is well-known and widely-accepted that this script was related to the Aramaic script, and must have been derived from it. It was however, probably modified to suit the languages of the subcontinent and was Indianized as well. The most commonly accepted view is that the Aramaic script arrived with the Archaemenid conquest of the region of northwest India in 500 BC and evolved over the next 200 years to reach its final form by the 3rd century BC where it appears in some of the Edicts of Asoka found in northwestern part of the Indian subcontinent. However, Asokan edicts in the Gangetic plains are written in Brahmi and not in Kharoshthi.

The history of alphabets

Let us now discuss the history of the alphabet in brief to understand how this can have a bearing on this theory. Logographic scripts in the Middle East had morphed into Logo-syllabic scripts by 2900 BC and it is very likely that the Indus script was a logo-syllabic script as well given that it was based on them. The Egyptians and Mesopotamians had learnt how to encode speech by using Acrophony and the Rebus principle. It is certain that the Indus script had reached the syllabic stage going by the presence of sign repetition in the Dholavira signboard (which implies this feature was used commonly and which would also imply that longer texts were most certainly available), and those who claim that it didn't are on very shaky ground indeed. A very detailed discussion of this was provided in the paper 'The reconfirmation and reinforcement of the Indus script thesis: A logical assessment and inquiry as to the elusive and enigmatic nature of this script' which was published in the January 2011 issue of the ICFAI Journal of

⁶ On the origin of the Indian Brahma alphabet, Georg Buhler, Chowkhamba Sanskrit Series office, 1963

⁷ Norman, Kenneth R. *The Development of Writing in India and its Effect upon the Pāli Canon*, in *Wiener Zeitschrift für die Kunde Südasiens* (36), 1993

History and Culture.⁸ The Proto-Sinaitic script⁹ of 2000 BC is the earliest known alphabetic script anywhere in the world and is the predecessor of a number of Middle Bronze Age inscriptions in the Sinai, Middle Egypt, and Canaan. It is the ancestor of Semitic alphabets and the ancestor of Proto-Canaanite, Phoenician and Aramaic and is also a very remote ancestor of nearly all modern alphabets. Proto-Sinaitic was acrophonic in nature, with each letter symbolizing a word that began with that letter and there have been two major discoveries of inscriptions in the script, the first was made as early as 1905 in Sinai by Hilda and William Petrie, which were dated to 1900 BC, and more recently in 1999 in Middle Egypt by John and Deborah Darnell, which were dated to 1700 BC. Only a few Proto-Canaanite inscriptions have been found dating to 1600 BC and are all very short in length. This script evolved into the Phoenician alphabet which later evolved into Aramaic.

Usage of Proto-Canaanite

Proto-Canaanite¹⁰ was used in Canaan which is situated to the east of the Mediterranean in the early Iron age and the late Bronze age and this region was believed to have been very important at that time i.e. circa 1700-1300 BC. This script was also believed to have been used by merchants living in the region. As discussed, all inscriptions are short, although a late inscription dating to 1000 BC has been found and runs to five lines recording the Hebrew language. Few will also dispute the importance of this region to the formation of Vedic culture as most components of Vedic culture such as Iron, chariots were imported from this region, and West Asia was strategically located and several ideas in the early Iron age were probably disseminated from this region. Thus, all technologies available in the region at that time could have certainly been imported by the cultures of the Gangetic plains.

Usage of Phoenician

Phoenician, is a later version of the alphabetic script and the term is generally applied after 1100-1000 BC. Phoenician was believed to have been spread widely by merchants and morphed into the Greek alphabet, for example, and most other alphabetic scripts of the early Ancient world. It would be instructive to speculate as to what point in time the alphabet was imported into the Indian subcontinent. Contacts with West Asia began sometime after the transfer of populations to the Ganga-Yamuna doab in 1900 BC. We have discussed contacts between the Gangetic plains and West Asia (both ways) in our paper Syncretism and Acculturation in Ancient India Parts One and Two, which include possible import of Iron from after 1800 BC, large-scale iron smelting in North India by 1200 BC, chariots certainly by 1500 BC, and it is more likely from research carried out in this particular aspect of Vedic culture, that it was Proto-Canaanite that influenced the alphabetic scripts of North India. In a later part of the paper, we will try to put whatever little evidence is available to investigate which of these hypotheses is true.

⁸ The reconfirmation and reinforcement of the Indus script thesis: A logical assessment and inquiry as to the elusive and enigmatic nature of this script, Mandavilli, Sujay Rao, ICFAI Journal of History and Culture January 2011.

⁹ Roger D. Woodard, 2008, "The Origins of the West Semitic Alphabet in Egyptian Scripts", in *The Ancient Languages of Syria-Palestine and Arabia*

¹⁰ Joseph Naveh, 1987. "Proto-Canaanite, Archaic Greek, and the Script of the Aramaic Text on the Tell Fakhariyah Statue". In Miller et al. ed., *Ancient Israelite Religion*.



Fig 1 Asokan Brahmi characters circa 300 BC

The antiquity of Brahmi

Let us first present the ideas of some scholars that deal with the antiquity of Brahmi and its primacy throughout India and then proceed step by step to show why current theories of origins of alphabetic scripts in India are obsolete.

Colin. P. Masica states in the book 'The Indo-Aryan languages' ¹¹

"In any case, the Brahmi script did exist and is, - if not as old as some would wish – of quite respectable antiquity. What is remarkable is that the Brahmi script has changed so much evolving into a multitude of mutually unintelligible forms."

"The differences are not superficial like those between Gothic ordinary Roman but at least comparable to those among Roman, Greek, Cyrillic and even Armenian. The graphemic inventories of those alphabets differ however in the Indian scripts they are with minor exceptions, theoretically the same. Both the degree of formal difference and the underlying common principle may be seen. Although such evolution may be perfectly natural, it should be noted that the Roman and Greek scripts did not undergo comparable changes over the same time span. It must be recalled also that not only the Brahmi script but also the later Gupta script had become totally illegible to contemporary Indian scholars by the nineteenth century and required international collaborative efforts before success was finally achieved by the 1830's."

"The reasons for the difference are not hard to find. The political unity India attained under the Mauryas was not approached again until the end of the seventeenth century under Aurangzeb some thirteen hundred years later. There was no centralized universal church to maintain the unity of the written word in the meantime, as there was in the west, nor one sacred written text as in the Islamic world. The Brahmanas themselves, regionally divided, maintained the Sanskrit language, it is true, but they wrote it when they did so, in the various regional scripts, the triumph of Nagari in this area being quite recent. Writing was not a religious monopoly in India, nor, as has already been noted, was it regarded as particularly sacrosanct by the religious establishment or by the population at large. It has been associated

¹¹ The Indo-Aryan Languages by Colin P. Masica Cambridge University Press 1991

rather with commercial record keeping. Many have been the manuscripts lost through use as kindling by villagers indifferent to the value of the written word. “

A.L Basham (1967:394)¹², whose credentials are unquestionable, also likewise indicated that Brahmi represented the Sanskrit sound system so well it may have already undergone a long development process to make it suitable for Indian languages before the earliest available or known inscriptions. Basham states “References to writing occur in the Pali inscriptions of the Buddhists and in the Sutra literature, but there is no clear mention of it in the Vedas, Brahmanas or Upanishads. The negative evidence is not however conclusive, and in the later Vedic period, some form of script may have been used by merchants. The Asokan inscriptions, which are the earliest important written documents of India, are engraved in two scripts almost perfectly adapted to the expression of Indian sounds. It is generally thought that these scripts had many years, perhaps many centuries of development before the days of Asoka. Whatever its ultimate origin, Brahmi is so skillfully adapted to the sounds of Indian languages, that its development must have been at least in part deliberate. In the form in which we have it, it is not the work of merchants but of Brahmins or other learned men who knew something of the Vedic science of phonetics. It may have begun as a mercantile alphabet, but by the time of Asoka, though still not completely perfect in all respects, it was still one of the most scientific scripts in the entire world.”

As Upasak even argues somewhat ponderously, "Brahmi may have begun as a mercantile alphabet, based either on vague memories of the Harappa script or derived from contact with Semitic traders, indeed it may have owed to both these sources; but by the time of Asoka, it was the most developed and scientific script of the world" (Upasak:1960)



Figure 2. Asokan Brahmi inscriptions

Problems with the theory that Brahmi was a derivation of Kharoshthi

We now examine the problems with the theory that Brahmi was a derivative of Kharoshthi and will also additionally state why such a theory cannot even be a contender to explain the origin of the Brahmi alphabet. Anyone who does not wish to agree with these conclusions must offer a systematic refutation of all the points raised in the paper. While this theory has always been controversial from the start, and has been questioned by many Western and Indian scholars, we will state why such theories must now be abandoned forthwith and why these, like many other antiquated paradigms in Indology, keep on throwing up a series of paradoxes. We also additionally wish to state, that the relatively more popular but still controversial theory that Brahmi was a derivative of the earlier Aramaic script and not the Kharoshthi script is untenable in the light of recent research, and we will eventually proceed to systematically refute this hypothesis as well as we present an alternative theory to explain the origin of the Brahmi alphabet.

12 The Wonder that was India, AL Basham, Sidgwick & Jackson, 1967

The Archaemenid Empire did not extend to most of India

It is also very well-known that the Archaemenid Empire which lasted a couple of centuries at the most, did not extend to the whole of India and was restricted to the North-Western part of the subcontinent which formed the easternmost part of its territory. Therefore, the Archaemenids never invaded the whole of the Indian subcontinent or ruled over a substantial portion of it. In such a scenario, it would be inconceivable to think that the Brahmi script could have derived from Kharoshthi when prior contacts between the Gangetic plains and the West of Asia certainly occurred and such contacts were pivotal to the formation of the culture of the Gangetic plains as was discussed in our earlier papers. Since technology for chariots and iron could only have been imported from West Asia and not from Central Asia, it is certainly possible that alphabetic scripts could also have been imported more so when alphabetic scripts certainly existed in West Asia according to mainstream models when these contacts began. Invaders can most certainly impose a script in their region through political diktat or will, more so when it is useful to them, but certainly couldn't have done so in regions they did not rule. People import what they need. If they need something, they may import it easily moreover when they have access to it. They cannot be forced into reading and writing. The Archaemenids wouldn't have had any reason to impose their script on the whole of South Asia. Not a single trace of Kharoshthi exists anywhere outside the north-west of India.¹³

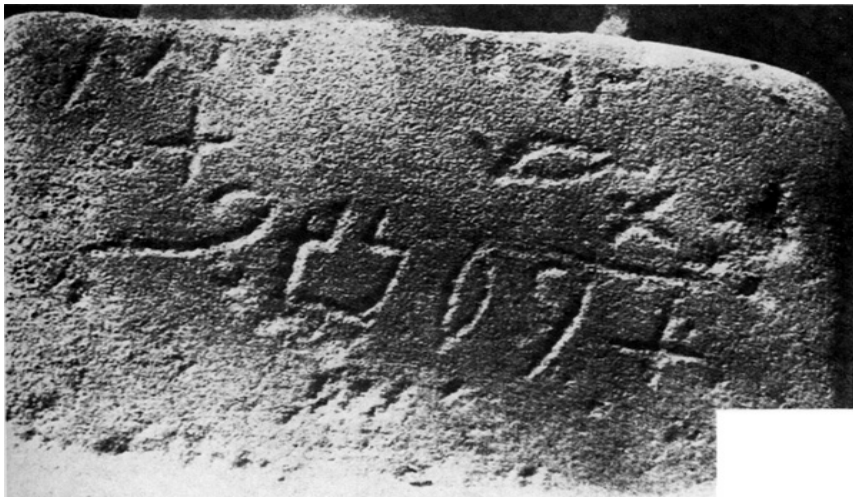


Fig 3. Proto Sinaitic inscriptions circa 2000 BC

Primacy of Brahmi script

Most, if not all scholars accept the primacy of the Brahmi script across the whole of India as opposed to a secondary script like Kharoshthi which was only used in the north-western part of the subcontinent. We now know that Brahmi had evolved into several variants very early and certainly much before the dawn of the Christian era, reached South India many centuries before the Christian era, and had even begun to spread out from South Indian shores by 100 BC to places such as far away Egypt. Thus, Brahmi truly is the ancestor of all modern scripts of North and South India, and a few scripts of South-East Asia as well; Kharoshthi is not. The spread of Brahmi in other parts of the subcontinent will be dealt with in greater detail in other sections of the paper, particularly in section pertaining to Tamil-Brahmi and the Bhattiprolu inscriptions.

¹³ Schmitt, Rüdiger. "Achaemenid dynasty" *Encyclopaedia Iranica*. vol. 3. Routledge & Kegan Paul.

Frank Raymond Allchin & George Erdosy state in the book "Archeology of Early Historic South Asia, the emergence of cities and states"¹⁴

"Foremost among these is the introduction of the use of writing which as we saw appears in Sri Lanka by BC 450, if not earlier. The inscriptions found here are in the Brahmi script which is ancestral to all later Indian scripts with the exception of Kharoshthi. In its earliest manifestations, Brahmi shows some variations from the Brahmi scripts of the Mauryan period, not least in the comparative irregularity, not to say, ungainliness of some of its letters. We expressed the view that there was not yet enough evidence to prove exactly where or when the first development of the Brahmi script took place, whether it was in the north or in the south, or on the East or West coasts of South Asia; and indeed we don't see this as matter of very great moment. What we see as important is the indication (already hinted at by Buhler) that the earliest use of the script arose in a mercantile context. We expect that when systematic excavation and dating is carried out in other parts of South Asia, further dated occurrences will come to light, and that through such additional evidence, a fuller picture may be formed of the introduction and early use of both the Brahmi and Kharoshthi scripts. There is not the same difficulty in establishing the source of the Kharoshthi scripts, it that it is patently an adaptation of the Aramaic script which was employed as the administrative script of the Archaemenid rulers of the northwest between the sixth and fourth centuries BC. Great interest must attach to discovering datable evidence for its first introduction and for its first chronology relative to that of Brahmi. It seems probable that the introduction of the two scripts was quite independent and that Brahmi was developed at an earlier date than Kharoshthi. We further comment briefly upon the growth and the scope of writing as we inferred it from the admittedly limited evidence available. The first introduction of the script was in the course of mercantile exchanges, and only at a somewhat later date was the script refined by North Indian grammarians as to make it an adequate vehicle for writing Sanskrit as well as Prakrit for scholarly use as well as for governmental and administrative uses. We suppose this development of late Pre-Mauryan times and that the scope and use of writing expanded rapidly under the stimulus of the Mauryan empire. "

The great German scholar Johann Georg Buhler likewise states:¹⁵

"It is impossible that the Kharoshthi script had been developed before 450 BC, and it is not to be thought of it could have penetrated into Eastern India where the Buddhists canon was composed much less could it have been there in general use, as the alphabets mentioned by the ancient Buddhists certainly was. Under the circumstances just discussed, the assumption that the alphabet referred to in the Jatakas, the Mahavagga and so forth is the Brahmi – which I repeat the paleographic facts contained in Asoka's edicts, the Indian letters on the Persian Sigloi, the legend of the Eran coin, the Bhattiprolu inscriptions strongly suggest undeniably gains a very high degree of probability. "

¹⁴ *The archaeology of early historic South Asia: the emergence of cities and states* by Frank Raymond Allchin, George Erdosy Cambridge University Press, 1995.

¹⁵ *Indian paleography, from about B.C. 350 to about A.D. 1300*

	Proto-Canaanite	Early Phoenician	Greek		Proto-Canaanite	Early Phoenician	Greek
>			A	l			Λ
b			B	m			M
g			Γ	n			N
d			Δ	s			Ξ
h			E	‘			O
w			Υ	p			Π
z			Z	ς			Μ
h			H	q			ϕ
t			Θ	r			Ρ
y			I	ς			Σ
k			K	t			T

Fig 4. A sign by sign Comparision between Proto-canaanite, Early Phoenician and Greek

Use of Brahmi in North West India in parallel and contacts between the Gangetic plains and NW India

We will also draw our attention to the presence of Brahmi inscriptions in North-Western India. These inscriptions have been dated to the reign of Emperor Asoka (269 BC to 232 BC) and are more recent than the Kharoshthi inscriptions by only two hundred years and if we assume that Brahmi derived from Kharoshthi, this throws up another serious paradox on the origin and spread of Alphabetic scripts, and must imply that Brahmi must have not just evolved but also spread very rapidly, and indeed with breathtaking rapidity. Such rapid evolution may be possible in theory, even if highly improbable, but it seems highly unlikely, indeed virtually impossible given the fact the Maurya dynasty which spread over almost the whole of India was centered on the Gangetic plains, in Bihar. (This was founded in 322 BC). Its predecessor, the Nanda Dynasty, was centered on the Gangetic plains as was Magadha, one of the great Mahajanapadas. Even Alexander the great never crossed the Punjab, having been stopped at the Jhelum, and all these factors must be taken into account to understand scenarios of development of scripts. In summary, the Gangetic plains were never conquered from the NW of India (as a matter of fact, never in its entire history) and instead we find that the NW of India was annexed or recaptured from the Greeks in around 310 BC. We also find that Brahmi had reached Tamilnadu and Southern Sri Lanka much earlier, probably 600 BC or a little later than this. The spread and evolution of scripts must also be studied in a political context, for a clear and comprehensive picture to emerge, and if this is done, few will even be willing to take this hypothesis seriously anymore.¹⁶

Buhler further states in 'On the origin of the Indian Brahma Alphabet'

¹⁶ Age of the Nandas and Mauryas by By Kallidaikurichi Aiyah Nilakanta Sastri, Motilal Banarsidas 1967

“The late finds of very ancient inscribed coins in North-western India leave no doubt that according to the epigraphic evidence, the Brahmi lipi was, since the beginning of the historical period the paramount Indian alphabet, used from the Himalayas to Cape Comorin and from the Khyber pass to the Bay of Bengal, while Kharoshthi always held a secondary place only in very confined territory. Again, the clear evidence of the forms of the Kharoshthi letters, the original stock of which is doubtlessly derived from the Aramaic alphabet of 500-400 BC, shows that this alphabet cannot have been developed, much less have penetrated into Eastern India at the early period to which the Buddhist works refer.”

Buhler further continues:

“From the Third century BC, we have the two Kharoshthi versions of Asoka's edicts incised in the North western corner of the Punjab at Shahbazgarhi and Mansehra. To the same or possibly a some what earlier period belong Sir Alexander Cunningham's coins from the site of Taxila or Taksashila, which prove a contemporaneous popular use of the Brahma characters in Gandhara (These coins have figured by Alexander Cunningham in his coins of ancient India, plates II and III). Sir Alexander Cunningham already concluded, that both alphabets were used in Northern India by the 3rd century BC. “

Buhler finally concludes

“The epigraphic evidence shows therefore that in the third centuries, the popular use of the Kharoshthi was strictly confined to the Punjab and it was nothing more than a secondary script running along by the side of Brahmi which prevailed all over India.”

Buhler also compared the North Semitic and the Brahmi scripts and noticed the direct involvement of the pre-Paninian Hindu priests in the development of the Brahmi script. He concluded that the same could not have been said of Kharoshthi. Elsewhere Buhler had suggested that Brahmi may have been introduced to India at least a century before the earliest inscriptions, but a several major changes have occurred since then, and a brief summary of why theories need to take into account latest developments in various fields is presented in this paper. Buhler did at times reach the conclusion that Brahmi may have been derived from Kharoshthi, but did mention that models of the origin of Brahmi were all inconclusive. The theory that Brahmi was much older than Kharoshthi and could not have therefore been derived from it is also supported by scholars such William Woodthorpe Tarn in 'The Greeks in Bactria and India'.¹⁷

The Eran coin

Eran also known as Airikina in Sagar district of Madhya Pradesh is known for its association with Ancient coins dating back to 300 BC or earlier. Alexander Cunningham was the first to find a large collection of coins here. There were punch-marked, die-struck or cast coins. A detailed study of the Eran coins has been carried out by scholars such as K.D Bajpai.¹⁸ An inscription discovered by Sir Alexander Cunningham here running from right to left and was dated by him to 400 BC, although Buhler believes it was slightly more recent. These coins are displayed in archeological museum of Dr. Harisingh Gour University, Sagar. There are at least 460 coins in silver, copper, tin and in bronze. Buhler concludes in the afore-mentioned work, in a statement that is likely to affect all notions on the age of the Brahmi script. “Its separation from the ordinary Bhamha alphabet must fall only before the third century B.C, but before the time the Eran coin was struck, and cannot have happened at a later period than the 5th century BC, though it may fall much earlier. “

Persian Sigloi

The Persian emperors from Darius I (510 to 486 BC) onwards usually struck two types of coins the Darics and the Sigloi, the former being of gold and the latter of silver. The term Sigloi may be derived from 'shekel' a kind of weight standard adopted by the Persians from the Ancient Babylonians.

¹⁷ William Woodthorpe Tarn in 'The Greeks in Bactria and India'. Cambridge University Press 2010

¹⁸ Bajpai ,K.D., *Indian Numismatic Studies*, New Delhi, 1996

Darics may weigh upto 130 grains or 8.42 grammes whereas Siglois can weigh upto 86.45 grains or 5.6 grammes and can be frequently countermarked with decorative punches. The discovery of Indian characters in the Persian Sigloi, may have something to with the decline of the Archaemenids and the subsequent spread of the Mauryan empire in the North West of India during this period and this hypothesis needs to be investigated more meticulously by studying the decline of the Archaemenids among the last emperors of which were Artaxerxes I and Darius III (450-330 BC) and the rise of the Mauryas during the latter half of this period and the interplay between both these forces in the North-West of India. Some scholars have even gone to the extent of stating that the gold for these coins was imported from India where it was cheaper but this hypothesis remains inconclusive. Buhler likewise observes Indian letters in the Persian Sigloi stating that the coins already had an Indian influence.

Edward James Rapson notes in this connection ¹⁹

“Sigloi are frequently offered for sale by Indian dealers and it is a reasonable inference that they are fairly often disinterred from the soil of India itself. That is precisely what might be expected from the working of economic law. The relative cheapness of gold would act like a lodestone. Many of them – including, it should be added, a very large proportion of them which are not directly of Indian provenance – are distinguished by the presence of peculiar countermarks which are thought to have their closest analogy on the square shaped pieces of silver that constitute the oldest native coinage of India. The resemblance to the Indian punch marks remains noteworthy; but proof of absolute identity is lacking.”

Bhattiprolu inscriptions

Bhattiprolu ²⁰ is a small town in Guntur district in Andhra Pradesh in Southern India. The town contains a Buddhist Stupa, 1700 square yards in area, 132 feet in diameter, parts of which were destroyed in the nineteenth century. Three gaskets containing relics and jewels were found there which include nine inscriptions in the Pali language and characters resembling Asoka's inscriptions dating to around 300 BC. Excavations that started in the year 1870 by Boswell, Sir Walter Elliot, Robert Sewell, Alexander Rea, Buhler continued till 1969 and were carried out by R. Subrahmanyam.

The script was written on the urn containing Buddha's relics. Twenty three symbols were identified in Bhattiprolu script. The symbols for 'ga' and 'sa' are similar to Mauryan Brahmi. 'Bha' and 'da' resemble those of the modern Telugu script. We can note that while the script found in Bhattiprolu was similar to the Asokan Brahmi, it was localized as well, and some scholars have pointed out that it contained features of Tamil Brahmi as well.

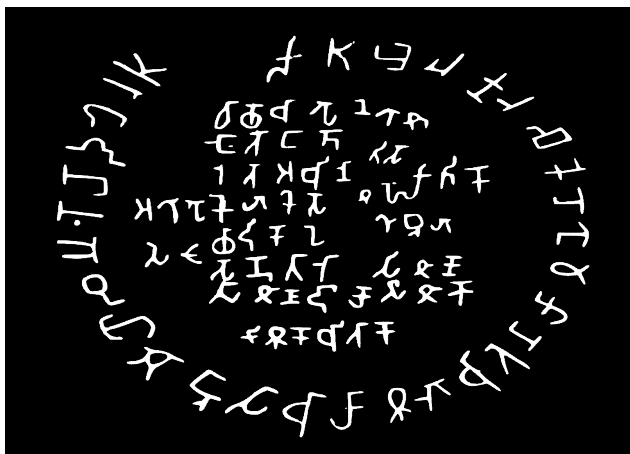


Fig 5 Bhattiprolu inscription Guntur district, Andhra Pradesh 300 BC

¹⁹ The Cambridge history of India , Edward James Rapson

²⁰ The Buddhist Architecture in Andhra, Dr D. J. Das, 1993, Books and Books, New Delhi

Adalbert J. Gail, Gerd J.R. Mevissen and Richard Salomon state in *Script and Image, Papers on art and epigraphy* implying that the inscriptions at Bhattiprolu were different from Asokan Brahmi and were influenced by Tamil Brahmi as well²¹ :

“Puzzlingly, the main reason for abandoning inherent (a) in Tamil Brahmi, namely the ability to write word final consonants and non-homorganic consonant clusters conveniently, does not apply in case of the Bhattiprolu inscriptions, since Middle Indo-Aryan has neither of these phonetic features. This would seem to imply that the dedicated long a matra too was first introduced in a Tamil context and the resulting system was only later imitated in Bhattiprolu. But no such Tamil description has yet been discovered. The shapes of five Bhattiprolu letters gha, ja, ma, la and sa differ to a certain degree from those seen in other varieties of old Brahmi. The ma for instance is upside down. But only in the case of Gha which is graphemically derived from the unaspirated ga is there real innovation.”

Buhler also concludes

“A still more paleographic witness for the antiquity of Brahma alphabets is the variety found in the inscriptions on the Bhattiprolu relic caskets, the value of which, I am sorry to say, I have somewhat underestimated in the introductory remarks to my edition in the *Epigraphica Indica* vol 2 p 323 ff. I no longer believe in the possibility to regard the gha of the edicts as a derivative from ga, and admit now that the Bhattiprolu ga is an independent form, the framer or frames of the alphabet having discarded one of the old Semitic radicals, which the common Brahma alphabet retains. I further must admit that the Bhattiprolu j and s are older forms than the corresponding ones of the edicts, the former being a tolerably faithful representation of the oldest forms of Semitic”

Tamil Brahmi

Tamil Brahmi is a type of Brahmi script used in South India and Sri Lanka. It is similar to Asokan Brahmi in most respects. However, it was already adapted to suit the languages of the south. A key difference is that it has different vowel marker from Asokan Brahmi. The vowel marker used in Asokan Brahmi is inherent. However, in Tamil Brahmi it is explicit. In many other respects it appears to be similar to standard Brahmi. Tamil Brahmi inscriptions have been claimed from as early as 500 BC or a century before this in different parts of Tamil Nadu and Sri Lanka.²²

A more recent archeological find from Adichanallur in Tamilnadu shows an urn containing examples of the Tamil – Brahmi script dated to 500 BC using preliminary thermo-luminescence dating. Early examples of this script were also found in Sri Lanka. The Archaeological Survey of India (ASI), Chennai Circle, made this discovery when it carried out excavations at Adichanallur after about 100 years. Dr. T. Satyamurthy, Superintending Archaeologist and Director of the excavation & M.D. Sampath, retired Director, Epigraphy, ASI, Mysore, have proposed that the piece of writing with just seven letters is in very rudimentary Tamil-Brahmi and can even be tentatively read "Ka ri a ra va [na] ta." This date is, however, subject to confirmation by carbon-14 dating, which is the more reliable method.²³

Three potsherds with Tamil Brahmi inscriptions have been discovered in an urn burial site at Marungur, 17 km from Vadalur in Cuddalore district which is in an interior part of the state. This has been dated to 100 BC suggesting that literacy had spread to interior areas by this time.

A broken storage jar with inscriptions in Tamil Brahmi script has reportedly been excavated at Quseir-al-Qadim, an ancient port with a Roman settlement on the Red Sea coast of Egypt. This Tamil Brahmi script has been dated to first century B.C. The same inscription can be found on the opposite sides of the jar. The inscription reads paanai oRi, that is, pot (suspended) in a rope net. An archaeological team belonging to the University of Southampton in the U.K., comprising Prof. D. Peacock and Dr. L.

²¹ Adalbert J. Gail, Gerd J.R. Mevissen and Richard Salomon, *Script and Image, Papers on art and epigraphy*, Motilal Banarsidass 2006

²² Champakalakshmi, R. *A magnum opus on Tamil-Brahmi inscriptions*,

²³ Mahadevan, Iravatham (2003). *Early Tamil Epigraphy: From the Earliest Times to the Sixth Century A.D.*. Harvard Oriental Series vol. 62. Cambridge, Mass:

Department of Sanskrit and Indian Studies, Harvard University

Blue, supervised excavations. Iravatham Mahadevan has confirmed that the inscription on the jar is in Tamil written in the Tamil Brahmi script of about first century B.C. Another Tamil Brahmi pottery inscription of the same period was found in 1995 at Berenike, also a Roman settlement, on the Red Sea coast of Egypt.

The Tissamaharama Tamil Brahmi inscription refers to a fragment of black and red ware flat dish inscribed in Tamil in the Tamil Brahmi script excavated in the town of Tissamaharama in Sri Lanka and has been dated to 200 BC. The inscription reads from right to left and from left to right to mean *thiraLi muRi*.

Tamil Brahmi inscriptions have also been claimed from as early as 450 BC in Southern Sri Lanka and would suggest that this script originated at an earlier point than previously accepted (Deraniyagala, 1990). Older models suggest that this script had been derived from a Semitic script, developed in Northern India in the third century BC, and spread southwards until it reached Sri Lanka (Buhler, 1896; Winternitz, 1927; Dani, 1963; Von Hinuber, 1990). The inscriptions of Nedunchezhiyan at Mankulam, the Irumporai inscriptions at Pugalur, the Jambai inscription of Adhiyaman Neduman Anji and Tamil-Brahmi inscriptions on hero stones in the upper Vaigai valley are other significant early inscriptions in Tamil-Brahmi.

The first corpus of a highly developed literature in Tamil may be dated to roughly 200 BC and includes classics such as Tholkapiyam. Intercourse between the North and South had developed at least by the end of the 4th century BC since Megasthenes, who himself may have never visited the south, tells the story of the queen of Madura, and Asoka's inscriptions talk about the south as well. North-South contacts became more widespread during this region because of several factors which included the Mauryan Empire which during its fullest extent in the 4th Century BC spread over most parts of South India including Tamilnadu. Even regions which were not a part of the Mauryan Empire were not uninfluenced by it! This was the first time an all-India political unity was achieved, and it is likely that this kind of a pan-India unity was not achieved until late in the Mughal Era. Also notable were the efforts by Jaina and Buddhist scholars to spread literacy in South India and Brahminical culture also spread into South India in this period as a reaction to Buddhism and Jainism. All this would have meant that literacy spread into South India after 600 BC very rapidly. On the other hand this cannot imply that alphabetic scripts did not exist in India earlier in the Aryavarta in the Gangetic plains and this will be dealt with in another part of the paper. North-South contacts before 600 BC are unknown except from the Ramayana, but as a substantial part of the epic was compiled between 200 BC and 200 AD, perhaps as a reaction to the spread of Jainism and Buddhism we cannot be sure if the epic deals with an event pertaining to previous period. The solar dynasty was probably a small dynasty in present day Uttar Pradesh as was perhaps founded in 2300 BC, with Rama being a kingling in 2000 BC but contacts between the north and south may not have happened at such early dates, given the size and the insignificance of these kingdoms. The Mahabharata also talks about contacts between the North and the South, but we will encounter the same problem here. Later additions to the Mahabharata are dated to between 200 BC and 200 AD. The Mahajanapadas of the Gangetic plains did not mostly extend outside North India and the North-West of India, and most of these were perhaps unstable and extremely small. Even the largest of these would pale into insignificance when compared to the Mauryan empire of much later times and must be remembered chiefly for their cultural value. There would have been a valid reason to include references to north-south contacts at a later date: Brahminism was in competition with Jainism and Buddhism, and the addition of such contacts and their projection into earlier periods in time may have helped forge a kind of cultural unity. Some Dravidian nationalists also speak of an earlier corpus of pre-Sangam literature, and settlements in South India before the time of the Buddha. These have generally been outside the realm of, or have already fallen outside the realm of mainstream science. If any such claims are to be made, they must make sense from all angles and must not conflict in a major way with historical models. It would also be prudent to wait for them to be accepted widely by mainstream scholars.

24

A Superficial Comparison between Brahmi and Kharoshthi characters

A superficial comparison between Kharoshthi and Brahmi will yield the following results and readers will be able to judge for themselves that the derivation of Brahmi and Kharoshthi in such a short time is very unlikely.'

	Consonants	Vowels
Similar	None	None
Dissimilar	All	All

On the other hand, very marked similarities exist between Brahmi and the Bet Dwaraka inscription which is classified generally as a late Indus inscription and which is 1200 years older (see table). Asokan Brahmi is also similar to other varieties of Brahmi in the subcontinent though not identical to them. On the other hand, similarities between Kharoshthi and Aramaic are well-known and a sign by sign comparison is presented in this paper. Thus all things considered a derivation of Brahmi from Kharoshthi is virtually impossible.

Similarities between Brahmi and Aramaic

Contrarily, similarities between Brahmi and Aramaic exist which clearly suggest that Brahmi is older than Kharoshthi. None of these similarities are carried forward to Kharoshthi, which clearly show that a derivation of Brahmi from Kharoshthi is practically impossible. Since this paper is intended to be presented in a logical and self-explanatory style, readers are strongly encouraged to cross-verify as many facts presented in this paper as possible.

The similarities between Brahmi and Aramaic are given below:

1. Gimel or Gimal in Aramaic and Ga in Brahmi are similar and almost identical to each other to each other. Needless to say, this similarity is not carried forward to Kharoshthi.
2. Tau in Aramaic and Ta in Brahmi are similar to each other. Needless to say, this similarity is not carried forward to Kharoshthi either.
3. Resh in Aramaic and Ra in Brahmi bear some resemblance to each other. This similarity is to a certain extent, carried forward to Kharoshthi as well.
4. Lamadhi in Aramaic and la are similar to each other. However la is flipped horizontally in Brahmi as it is in Arabic and Syriac. The aspirated la in Brahmi is also similar to this sign. The sign in Kharoshthi is different completely.

Comparison between Brahmi and Phoenician

Let us now carry out a comparison between Brahmi and Phoenician which is older than Aramaic, belongs to the same region as Aramaic and dates back to 1050 BC. The results are even more amazing.

1. The A in Phoenician is similar to the A in Brahmi but is flipped horizontally in Brahmi. The Aleph in Aramaic is similar to an 'X' and may be related to these two, but readers may exercise their own judgment as usual.
2. The G in Phoenician is similar to Ga in Brahmi. As discussed, this similarity was carried forward to Aramaic as well, but not Kharoshthi.
3. The T in Phoenician is similar to Tha in Brahmi. As was discussed, this similarity was carried forward to Aramaic as well, but not Kharoshthi.

4. The L in Phoenician is similar to 'La' in Brahmi. As noted this similarity was carried forward to Aramaic as well but not to Kharoshthi.
5. The R in Phoenician is similar to 'Ra' in Brahmi. As noted, this similarity was carried forward to Aramaic as well

As would be evident, all (emphasis on the word 'all') similarities between Brahmi and Aramaic are also found in a comparison between Brahmi and Phoenician as well – to any one who claims Brahmi was derived from Aramaic, we can say with the same degree of confidence that Brahmi could have been derived from Phoenician as well.

However note the following:

1. The Brahmi 'Cha' is similar to the sign in Phoenician for Q but is inverted. However this similarity is not carried forward to Aramaic.
2. The Brahmi 'Tha' appears to be more similar to Phoenician T than it is to Aramaic. (It is also almost identical to Greek, suggesting that the split-up happened sometime before the Phoenician alphabet)
3. The Brahmi 'Dha' has a vague resemblance to D in Phoenician and to the Delta sign in Greek but bears no resemblance whatsoever to the equivalent sign in Aramaic.
4. There are significant differences between Brahmi and Aramaic. Aramaic did not distinguish between retroflex and dental stops, while dental and retroflex stops are graphically very similar in Brahmi. Brahmi did not have Brahmi's aspirated consonants. It would be somewhat difficult to believe that these changes happened so rapidly when Brahmi had travelled all the way to Sri Lanka soon after 600 BC. It must be noted that Aramaic is not significantly older than this. Moreover, this aspect needs to be considered together with all other factors.

Further to these, the Phoenician hypothesis is stronger than the Aramaic hypothesis because of the following two factors:

1. Phoenician was considered to have been more influential worldwide as an alphabetic system than Aramaic and influenced the development of many other alphabets worldwide
2. Contacts existed earlier between the Gangetic plains and West Asia, and one can easily argue for contacts between 1700 BC and 1200 BC (all this date to a period before the development of the Phoenician alphabet and therefore even the Phoenician hypothesis may be way off the mark) based on a wide variety of factors which we had discussed in an earlier paper.

Comparison between Brahmi and Proto-Canaanite

Let us now go even further back in time and carry out a comparison between Brahmi and Proto-Canaanite which is dated to a period between 1900 BC and 1100 BC.

This throws up some very interesting results indeed.

1. The sign for w is similar to the 'va' sign in Brahmi but is inverted in Brahmi (however the Phoenician alphabet has a completely different sign).
2. We can note that Na in both Proto-Canaanite and Phoenician bear a vague resemblance to the 'Na' in Brahmi.
3. We can also note that the 'Sa' in Brahmi bears a striking resemblance to both Phoenician and Proto-Canaanite but is inverted in both cases. A more detailed discussion of this will be made in the section dealing with the Bet Dwaraka inscription.

4. The 'Ka' in Brahmi is similar, if not identical to the T sign in Proto-Canaanite. However, this similarity is not carried forward to Phoenician.
5. The 'Kha' in Brahmi is virtually identical to the L sign in Proto-Canaanite. However, the L sign is flipped both vertically and horizontally by the time it reaches Phoenician.

Note that some of the signs bear a much more striking resemblance with Proto-Canaanite than they do with Phoenician. On the other hand, there are several alphabets which are common to Phoenician but not Proto-Canaanite which we listed in a previous section.

To reiterate, these are:

1. The A in Phoenician is similar to the A in Brahmi but is inverted in Brahmi. The A sign in Proto-Canaanite bears no resemblance to this whatsoever.
2. The G in Phoenician is similar to Ga in Brahmi. This sign however, appears inverted in Proto-Canaanite.
3. The W in Phoenician is similar to Ta in Brahmi but is inverted and is not similar to any sign in Proto-Canaanite.
4. The T in Phoenician is similar to Tha in Brahmi. This is only similar to another sign in Proto-Canaanite corresponding to the Greek O.
5. The L in Phoenician is similar to La in Brahmi but was inverted horizontally. Although the sign in Proto-Canaanite is also similar, it is inverted vertically and not horizontally.
6. The R in Phoenician is similar to Ra in Brahmi. The sign in Proto-Canaanite is different.
7. The Brahmi 'Cha' is similar to the sign in Phoenician for Q but is inverted. The sign for this was however, different in Proto-Canaanite.
8. The Brahmi 'Dha' has a vague resemblance to D in Phoenician but bears no resemblance whatsoever to the equivalent sign in Proto-Canaanite.

Comparison between Brahmi and Proto-Sinaitic

Let us now attempt a very detailed comparison between Brahmi and Proto-Sinaitic which is the earliest known alphabetic system in the world and dates back to 2000 BC.

Some signs in Brahmi can be traced all the way back to Proto-Sinaitic too, and these are as below:

1. Waw (inverted in Brahmi). This similarity is carried forward to Proto-Canaanite also.
2. Gimel (inverted in Brahmi). This similarity is carried forward to Proto-Canaanite also.
3. Sin (inverted in Brahmi). This similarity is carried forward to Proto-Canaanite also.
4. Lamedh (la). This similarity is carried forward to Proto-Canaanite also.
5. Nun (very vague resemblance to Na). This similarity is carried forward to Proto-Canaanite also.

Other the other hand, and very interestingly indeed, there are no additional similarities between Proto-Canaanite and Brahmi which cannot be traced to Proto-Sinaitic. This means that the split up between West Asian and Indic alphabetic systems happened very early, and are as a result of mercantile

contacts between West Asia and the Gangetic plains, which were crucial to the formation of the cultures of the Gangetic plains.

This proves with certainty (although skeptics are still welcome to air their views) that the split up between West Asian or Semitic alphabets and Indic alphabets happened earlier to the evolution and development of the Phoenician alphabet but later than, or in a very optimistic case, along with, or just after, the Proto-Canaanite alphabet.

Let us calculate when this might have happened. In order to do this, we take a simple mean between the earliest date for the evolution and development of the Proto-Canaanite alphabet and the earliest date for the evolution and development of the Phoenician alphabet. This will not conflict with known evidence in India as we shall soon see, but this model must be refined further as more evidence in both India and West Asia becomes available.

$$(1900 \text{ BC} + 1050 \text{ BC})/2 = 1475 \text{ BC}$$

If this figure is rounded off to 1500 BC, it still tallies very well with the commencement of contacts between the Gangetic plains and West Asia and even the presence of Indian (or 'Indian Aryan' influences in West Asia). All these have been discussed in very great detail in the paper dealing with the Aryan problem, and readers may wish to read both parts of this paper first. This will also imply, in the view of most that the Proto-Canaanite alphabet was more important and influential than current historians acknowledge, and even that more examples of this script must exist in West Asia, and that these must pertain to an early date, an example of how multi-disciplinary and multi-region approaches and modeling can help push back the boundaries of our knowledge much, much further. From our acculturation model, which was written using a multi-disciplinary approach, the earliest petty kingdoms on the Gangetic plains were dated to 2300 BC, the unification of North India under King Bharata and the commencement of contacts with West Asia date to 1700 BC. And, lo, the dates tally perfectly!!

Comparison of Kharoshthi and Aramaic

Although a comparison between Kharoshthi and Aramaic may not be warranted to prove our case, we nonetheless do it because it helps us to show very convincingly that Kharoshthi was a derivative of Aramaic. This clearly could not have been the case with Brahmi, which means that the "derivative of Aramaic" theory is invalid and a complete non-starter in all respects. Even a very basic observation will show that an overwhelming majority of the signs in Kharoshthi are derived from the Aramaic script.



Fig 7 Kharoshthi Characters c 400 BC

	'āleṭ	ṣādeḥ	dāleṭ	nūn	bēṭ	yōḍ	rēš	wāw	ḥeṭ	sāmek	zāyin	hē
Aramaic	𐤀	𐤁	𐤂	𐤃	𐤄	𐤅	𐤆	𐤇	𐤈	𐤉	𐤊	𐤋
	𐤌	𐤍	𐤎	𐤏	𐤐	𐤑	𐤒	𐤓	𐤔	𐤕	𐤖	𐤗
Kharoṣṭhī	a	ca	da	na	ba	ya	ra	va	śa	sa	za	ha
	𑀀	𑀁	𑀂	𑀃	𑀄	𑀅	𑀆	𑀇	𑀈	𑀉	𑀊	𑀋

	kap	qōṭ	gīmel	tāw	pēh		mēm	lāmed	šīn
Aramaic	𐤌	𐤍	𐤎	𐤏	𐤐		𐤑	𐤒	𐤓
	𐤔	𐤕	𐤖	𐤗	𐤘		𐤙	𐤚	𐤛
Kharoṣṭhī	ka	kha	ga	ta	pa		ma	la	ṣa
	𑀀	𑀁	𑀂	𑀃	𑀄		𑀅	𑀆	𑀇

ga	ca	na	da	pa	ta	ba	ja
𑀂	𑀁	𑀃	𑀂	𑀄	𑀃	𑀅	𑀆
gha	cha	ṇa	dha	pha	tha	bha	ña
𑀂	𑀁	𑀃	𑀂	𑀄	𑀅	𑀆	𑀇

ṭa	ṭha	ḍa	ḍha
𑀈	𑀉	𑀊	𑀋

Fig 7. A sign by sign comparison between Kharoshthi and Aramaic

Kharoshthi and Brahmi numerals

Kharoshthi included a set of numerals that were similar to Roman numerals. The symbols were “I” for the unit, “X” for four, “𑀅” for ten (doubled for twenty), and “𑀆” for the hundreds multiplier. On the other hand, Brahmi numerals were the ancestors of all numerals in the region, and one, two and three were represented by the equivalent number of horizontal strokes. No scholar accepts the view that Brahmi numerals were related to Kharoshthi numerals and Brahmi numerals were considered to have been the ancestors of modern scripts in India today. Readers are also encouraged to carry out a very detailed comparison between Brahmi and Kharoshthi numerals on their own and arrive at their own conclusions.

—	=	≡	𑀅	𑀆	𑀇	𑀈	𑀉	
one	two	three	four	five	six	seven	eight	nine

𑀊	𑀋	𑀌	𑀍	𑀎	𑀏	𑀐	𑀑	𑀒
ten	twenty	thirty	forty	fifty	sixty	seventy	eighty	ninety

𑀆	𑀇
one hundred	one thousand

Fig 8 Brahmi numerals

1 2 3 4 10 20 100 1000

Fig 9 Kharoshthi numerals

As Karl Menninger points out ²⁵

“Numbers appear on both forms of writing although quite different in nature. Thus, there have been essentially three kinds of written Indian numbers – the Kharoshthi, the Brahmi, and in the third place, the familiar place – value notation with the zero sign which we use today, which made use of the Brahmi numerals and developed directly out of them. The Kharoshthi numerals are however not ancestors of our present numerals, while the Brahmi numerals are.”

Mortimer Wheeler’s Dark Age hypothesis is obsolete

No uptodate scholar would be willing to consider the view that Post-Harappan India did not have towns and cities. We have taken the recent views of a large number of mainstream Western scholars in an earlier paper, and in addition to Pargiter (1922), Smith (1973), W. Rau and Witzel (1989) ²⁶ have also written about the kingdoms of the Gangetic plains. Older nineteenth century notions of Post-Harappan India are also at complete odds with Indo-Aryan culture, make people suspicious and may soon be consigned to the rubbish heap of history. Even A.L Basham, several decades ago (Basham:1967), spoke about the existence of the cities of Hastinapura and Kaushambi in the Gangetic plains only stating that they could not yet be dated with certainty. Readers may wish to go through Part Two of our paper dealing with the Aryan problem and also take the views of the scholars mentioned above in order to obtain a balanced view of Post-Harappan India.

The term Vedic India is outdated

We have used the term Post-Harappan India in our paper to show the diversity of post-Harappan cultures. We were not the first to use the term and the term has already been in use during the past few decades by younger and mainstream Western and Indian researchers. The term Post-Harappan India is more inclusive and does better justice to the diversity of the Gangetic plains. While the Brahminical orthodoxy did certainly degenerate with the passage of time, their degradation having been to a large degree due to greed and a desire to exploit, there were many in the region who did not come under their sway or care at all for what they had to say; the Term Iron age Vedic India is a gross over-simplification; large sections of the population would not have even been interested in the RV to begin with, and there were always flashes of genius, brilliance and creativity in the Gangetic plains.

Taxila

One must take into account evidence at Taxila also. Taxila (now in Afghanistan) is widely believed to have been a major centre of learning in the Ancient World by at least 600 BC, suggesting that literate traditions had spread by at least this point in time. The ruins of Taxila consist of many buildings and Buddhist stupas located in a large area. Some scholars date Takshashila's existence back to the 6th century BC.

In a 2010 report titled *Saving Our Vanishing Heritage*, Global Heritage Fund identified Taxila as one of 12 worldwide sites most "On the Verge" of irreparable loss and damage, citing insufficient management, development pressure, looting, and war and conflict as primary threats

²⁵ Number words and Number symbols: A cultural history of Numbers, Karl Menninger 1992

²⁶ Early Sanskritization. Origins and development of the Kuru State. B. Köhler (ed.). Recht, Staat und Verwaltung im klassischen Indien. The state, the Law, and Administration in Classical India. München : R. Oldenbourg 1997 : 27-52

Sir John Hubert Marshall (A guide to Taxila) says “Taxila is frequently mentioned as a university centre where students could get instruction in almost any subject, religious or secular from the Veda to Mathematics or medicine, even astrology or archery.” Taxila is also referred to as a university or a centre of learning in many world Encyclopedias and by Western Authors such as William Woodthorpe Tarn, Rudolf Hoernle, August F. Hoernle, Agnes Savi, Hartmut Sharfe, Norm Phelps, John Calhoun Merrill, Victor M. Fic, and several other mainstream western authors. It is also frequently mentioned in the Jataka tales and was also mentioned by Hiuen Tsang. Witzel himself acknowledges that India had early development of mathematics, good surgeons and good philosophy 2000 years ago, and a stretch of a few hundred years, when most other scholars have acknowledged it should not be difficult, even if the word university is unpalatable to most. There was a renaissance in 600 BC, and Buddhist monasteries were established all over India. Buddhism spread rapidly throughout India and the Satavahana dynasty of 200 BC in Andhra Pradesh in Southern India made Buddhism its state religion.^{27 28}

Baudhayana

Baudhayana who lived in around 800 BC is believed to have been an important mathematician according to mainstream and not Hindutva sources. He was primarily a priest, who was however noted for his many contributions to mathematics. Other mathematicians who lived just after 600 BC were Apastamba, Manava and Katyayana.^{29 30 31}

The “script” at Bet Dwaraka

The script at Bet Dwaraka consists of a glyph that consists of seven characters and is thermoluminescence dated to 1528 BC, and is recklessly and loosely characterized as a late Indus script in most circles including most mainstream circles. While serious research on the script at Bet Dwaraka has not been conducted yet, none of the seven signs, barring one rarely occurring Indus sign, has been found in any other Harappan site this far and all things considered may not have been derived from the Harappan script at all: instead one finds a marked similarity with the Phoenician alphabet (An ancient script of West Asia derived from the Proto-Canaanite alphabet dating to the same period.) In any case, why would the Harappans, already moribund by 1500 BC, take such great pains to develop a new script? A new script would more likely suggest the infusion of new ideas or a new culture. Here is another observation that should further reinforce this thesis: The classical Indus script was retained unchanged till as late as 1100 BC. The script at Bet Dwaraka though different from the classical Indus script is a full four hundred years older, suggesting that two scripts were in use in the Post-Harappan period. Thus the possibility of this being a ‘late Indus script’ can be ruled out.³²

27 Taxila: An Illustrated Account of Archaeological Excavations, 1913-1934 John Marshall Motilal Banarsidass 1977

28 Non-Western educational traditions: indigenous approaches to educational thought and practice

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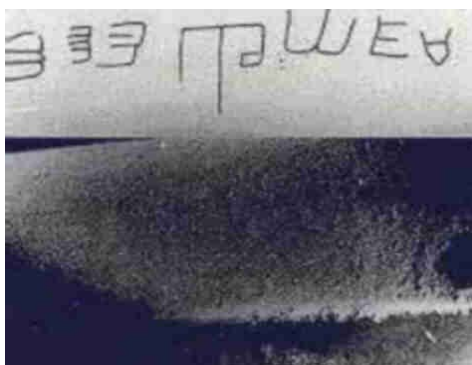


Fig 10 A late Indus inscription or Post-Harappan inscription dated to 1528 BC using the thermo-luminescence method in Bet Dwaraka, Gujarat, India

Let us now sum up our very evident conclusions below:

1. The inscription is short and consists of only seven characters.
2. Dates to well after the decline of the Indus: We know that the Indus declined after 1900 BC and it is highly likely that the Harappans had developed another script this late when they were already a spent force.
3. It is not located in a region covered by the IVC but within the Aryavarta. A very detailed analysis of the location of the Aryavarta from textual sources has been done in the paper Syncretism and acculturation in Ancient India Part One.
4. Displays sign repetition as can be expected from a speech-encoding system.
5. Dates to a period when there were cultural contacts between the Gangetic plains and The Middle East
6. Dates to a period when both Proto-Sinaitic and Proto-Canaanite (both are alphabetic) existed
7. None of the signs barring a rarely occurring Indus sign match the signs in the Indus script and this sign is similar to a sign in West Asian alphabetic scripts as well.
8. A Comparison between the script at Bet Dwaraka and the Proto-Sinaitic and Proto-Canaanite alphabets is presented below and few will dispute that the similarities are too striking to ignore
9. A Comparison between the script at Bet Dwaraka and the Phoenician alphabets is presented below and few will dispute that the similarities are too striking to ignore

Additional conclusions are:

1. Since there are dissimilarities between this script and other script, it would imply that it had entered India earlier. From our model contacts with West Asia began in 1700 BC.
2. Since this inscription has been found in the south-western most part of the Aryavarta, in a location that was not extremely important to the cultures of the Gangetic plains, it would imply that more examples of this existed
3. We must also bear in mind the fact that obtaining archeological evidence in the Gangetic plains is difficult for other reasons, but we can infer that literacy existed in isolated pockets, and order to carry out research on topics such as these, few will dispute the fact that multi-disciplinary approaches are the key and can serve us very well where most other methods will fail miserably.

A very detailed analysis of this glyph is now presented below:

Sno	Signs from left to	Comparison with Indus script	Comparison with Proto-Sinaitic	Comparison with Proto-Canaanite	Comparison with Asokan Brahmi	Comparison with Phoenician	Comparison with Aramaic

	right						
	1,3	Yes, similar to the rarely used Indus plough sign But it is also similar to a sign in Phoenician also and its derivation from the Indus script is impossible for other reasons (see explanation).	Similar to Kaph but flipped 90 degrees	There is some resemblance to the Proto-Canaanite 'K' although the direction is flipped by 90 degrees.	No equivalent sign	Similar to the fifth sign in Early Phoenician for H (Greek E)	No similarity found
	2	The second sign is slightly different from the first and third because it contains an additional stroke	Similar to one of the versions of kaph but is flipped 90 degrees.	No similarities with any character in Proto-Canaanite although one may still wish to state that it is similar to signs 1,3 and therefore similar to the above sign in Proto-Canaanite	No similarities with any character in Asokan Brahmi	No similarities with any character in Phoenician although one may still wish to state that it is similar to signs 1,3 and therefore similar to the above sign in Phoenician.	No similarity found
	4	No equivalent		No similarity with any sign in this script	Similar to the 'bha' sign	Only vaguely reminiscent of the S sign in early Phoenician	Similar to Heth but there are differences. The equivalent in Early Phoenician i.e. S is also remotely similar (S in Phoenician is equivalent to Heth)
	5	No equivalent	Similarity to Sin and to	Identical to Proto-	Similar to the 'gha'	Identical to Phoenician	Similar to Shin, but

			Kaph but minus one stroke	Canaanite (The equivalent of Greek Sigma)	sign	(The equivalent of Greek Sigma). This character appears to be closer to proto-Canaanite than Phoenician	the Proto-Canaanite version is closer
	6	No equivalent		No similarity with any sign in this script	No equivalent sign	No similarity with any sign in this script	No similar sign
	7	No equivalent		No similarity with any sign in this script	Similar to the 'ma' sign	No similarity with any sign in this script	No similar sign

Let us summarize our observations as follows:

- Number of signs in this inscription: Seven
- Number of unique signs in this inscription: Six
- Number of unique signs related to Phoenician: Two
- Number of unique signs related to Proto-Canaanite: One
- Number of unique signs related to Brahmi: Three
- Number of unique signs not related to any other script: Two
- Number of unique signs related to Proto-Canaanite but not Phoenician: Zero
- Number of unique signs related to Phoenician but not Proto-Canaanite: One
- Number of unique signs related to Phoenician but not Aramaic: One
- Number of unique signs related to Aramaic but not Phoenician: Zero
- Number of unique signs related to Brahmi but not to Phoenician or Proto-Canaanite: Two
- Number of unique signs related to Brahmi clearly representing the same sound: Zero (one inconclusive)
- Number of unique signs not related to West Asian Alphabetic scripts: Three
- Percentage of unique signs not related to West Asian scripts: 50%

There is also one very interesting observation one can make here. The second sign of the glyph is similar to a variant of the sign for Kaph in Proto-Sinaitic but is flipped 90 degrees. It is not similar, however, to any other sign in Proto-Canaanite. That means, the split up between West Asian and Indic happened very early indeed.

Thus, it would appear that the script at bet Dwaraka was more closely related to contemporaneous scripts in the Middle East and that this script perhaps entered India one or two centuries before this date (1528 BC) when contacts between the Gangetic plains and West Asia began, as these were critical to the formation of Vedic culture. This is because this script was already Indianized by this time, and had to undergo a long process of evolution to reach Asokan Brahmi.

We can state that the split up between West Asian and Indic alphabets took place between 1700 BC and 1500 BC, most likely around 1700 BC or when contacts between West Asia and the Aryavarta or

the Gangetic plains started. We can invoke the principle of Ethnogenesis here. Like the Indus script in some ways, but quite unlike it in some other ways, it would have been indigenized rapidly first and then would have evolved more slowly. In addition, we can also state with confidence that its classification as a 'Late Indus script' is most certainly wrong.

Therefore, this glyph can be tentatively be read as (from left to right)

Ha ? Ha Bha Sa ? Ma (Or)
Ha Ka Ha Bha Sa ? Ma (Or)
Ka ? Ka Bha Sa ? Ma (Or)
Ka ? Ka Sa Sa ? Ma

If read from right to left, this will be

Ma ? Sa Bha Ha ? Ha (Or)
Ma ? Sa Bha Ha Ka Ha (Or)
Ma ? Sa Bha Ka ? Ka (Or)
Ma ? Sa Sa Ka ? Ka

This reading is very tentative and is open to other interpretations, although we can draw some very definite conclusions about the nature of this script from the analysis of this glyph and more conclusions can follow if and when more inscriptions of this kind are found in the archeologically challenged and challenging Gangetic plains.

How did we arrive at these conclusions?

We have arrived at these conclusions using a combination of the following approaches:

- We have carried out a very detailed comparison of Brahmi with all the alphabetic scripts of the Middle East, taking one at a time.
- A Comparison of the Bet Dwaraka inscription often misclassified as a Late Indus script with Brahmi and other alphabetic scripts of West Asia has been carried out..
- An analysis of Cultural contacts between India and West Asia has been carried out in an earlier paper and we have presented a summary of points here.
- A study of the culture of the Gangetic plains and its evolution from Aranyaka or forest-based culture in the Vedic homeland and early urbanism in the Gangetic plains. A very detailed dating paradigm, almost the most detailed ever in this field, was presented in the aforesaid paper dealing with the Aryan problem.

A comparison with traditional methods

Some scholars cite RV 10.71.4 as an evidence for literacy, but this is still controversial and this hymn reproduced below is very ambiguous, and like most other hymns in the RV, is subject to myriad interpretations, so much so that the number of interpretations will in a vast majority of cases be equal to or at least close to, the number of scholars, leading to, like most other issues in Indology, mayhem, discord and eventually distrust and suspicion.

*One man hath ne'er seen Vāk, and yet he seeth: one man hath hearing but hath never heard her.
But to another hath she shown her beauty as a fond well-dressed woman to her husband. (RV 10.71.4)*

This apart, the first definite literary references to writing and written documents come from the Buddhist Pali texts, especially the Jatakas and the Vinaya Pitaka. Panini's Asthadyayi refers to the word 'Lipi' which means script. F.E Pargiter does talk about literacy at a much earlier date, and he states that it was limited and came somewhere in between, which could only have meant West Asia.

Most other scholars have attempted to search the RV for evidence of literacy. There are at least five problems with this approach:

- The RV was never meant to be a history textbook; it only was a cultural symbol of the Gangetic plains, and was obviously compiled, like the texts of any other great religion, because any emerging culture needs an ideal to look up to, and it would have served as a very useful symbol of Aryan culture and would have undoubtedly helped in its propagation.
- The RV can be ambiguous, hyperbolic, and more importantly, silent on many vital issues and is subject to different interpretations by different scholars. Given this, it would be virtually impossible to strive for a consensus. Such approaches can never pass the test of infallibility. Indology, has, as a discipline, always been bogged down by vast distances in ideology and unnatural and vast differences in perception. In order to minimize chaos and confusion and bridge worlds, it will be even more necessary to develop robust research methods, and ones addressed at the greatest of skeptics and not ones that can be easily be dismissed off-hand as being inconclusive.
- The priests themselves may not have used writing as a medium or approved of it. The extent of control the priests at Kasi exercised over the populations of the very vast Aryavarta is open to serious debate.
- While parts of the RV were compiled by Non-Brahmins, the RV was as a whole symbolic of Brahminical culture and not the composite culture of the Gangetic plains.
- We have all along been emphasizing multi-disciplinary approaches and India-specific research strategies. With multi-disciplinary approaches and India-specific research strategies, we have and can keep on working wonders.

AL Basham summarizes this very succinctly in "The Wonder that was India",

"Though Aryan culture had by now made great advances there is still no mention of coined money or writing, both of which were certainly used in India before the time of the Mauryas. Coinage may have been introduced towards the end of the 6th century BC through Persian influence, but it is doubtful whether we should accept the negative influence of later Vedic literature to show that writing was wholly unknown, for this literature was intended for a limited audience of priests, who had developed a unique system of memory training, and who may have well looked on writing as an objectionable innovation. There is evidence in the literature itself, of faint contacts with Mesopotamia, notably in the Indian flood legend (p.304), which first appears at this time and which bears some similarity to that of Babylon. After a break of many centuries, Indian merchandise was again finding its way to Mesopotamia, and it is possible that Semitic merchants, or Indian merchants returning from the West, brought an alphabetic system of writing, which was gradually taken up by the learned and adopted to the phonetics of Indian speech, to become the Brahmi script of Mauryan times."

If we assume that early alphabetic scripts were introduced from West Asia between 1700 and 1500 BC (This hypothesis can be more convincingly proven as research on the History of writing systems particularly alphabetic scripts in India and West Asia progresses). The date of 1528 BC for this inscription, as known through thermo luminescence dating, and if accurate (it also tallies with the date of the site where it was found, and also additionally tallies with our acculturation model very well, in a manner that makes the spread of Aryan culture logical and self-explanatory, and is consistent with all ideas of Indian history), is nothing to be afraid of, since it does not conflict with any historical models at all. It can even help refine models of the development of alphabetic scripts. Few will agree with the suggestion that India could have been the originating point for alphabets. The Middle East was definitely more strategically

located to serve as a conduit for new ideas. What is vital is that research on India can certainly benefit research on nearby regions too, and the history of alphabetic scripts in general, and this alone should serve as a new incentive for more people to enter the field.

Sanskrit Vs Prakrit

Let us now attempt to launch an investigation into another issue: Was early Post-Harappan literacy in Sanskrit or in the Prakrits?

Sanskrit as we discussed in our earlier paper, was submerged very early by the Prakrits and other languages of the Gangetic plains and was snuffed out as a spoken language very early, perhaps even before the Rig Veda was compiled. The fact that Vedic Sanskrit may not have been a spoken language at all is admitted to by even the most rabid Hindu nationalists, and its chiefly liturgical usage, its primary importance as a lingua franca of the elites and as a cultural symbol of Ancient India and not as a spoken language is admitted to by them. The Vedic priests would not have liked Sanskrit being used widely, leave alone being written, and Sanskrit was used as a lingua franca of the elite only because the Prakrits, of which there were many in number, may have been quite useless in this regard, and ill-suited to serving this role. The Vedic texts were transmitted orally because the priests may not have approved of writing as a medium, but as discussed their hegemony may have been limited in the culturally very diverse Gangetic plains, Aryavarta or Post-Harappan India. Many people may not have come under their sway at all, and as we mentioned in a previous part of the paper, few would even have been interested in the RV to begin with.

Sheldon I. Pollock says in his book “The language of the Gods in the World of Men”³³

“Once Sanskrit emerged from the sacerdotal environment to which it was originally confined, it spread with breathtaking rapidity across Southern Asia. Within three centuries, Sanskrit became the sole medium by which ruling elites expressed their power from as far West as Purushapura in Gandhara to Panduranga in Champa in Central Vietnam. Sanskrit probably never functioned as an everyday means of communication, not in South Asia itself, nor was it ever used excepting among the elites as a bridge – or link – or trade language. There is little evidence to show that it was ever used as the language of rule. Tasks such as communication or revenue accounting appear to have been accomplished by informal use of the local language. The work Sanskrit did was beyond the quotidian and the instrumental. It was directed above all towards articulating a form of political consciousness and culture.”

Romila Thapar (1973:51) similarly states, “The earliest Sanskritization of any importance is that of the Saka ruler Rudraraman and dates to 200 AD, the previous inscriptions having been composed in the Prakrits and other languages.”

Madhav M Deshpande likewise observes, (Sanskrit and Prakrit Madhav M Deshpande)³⁴

“The rise in the prestige of Sanskrit must have begun slowly after the fall of the Mauryas and it gradually continued to rise in such a way that the royal inscriptions of India gradually changed from Prakrit to Sanskrit. The Saka rulers began using Sanskrit which was also used extensively by the Gupta kings. While the early inscriptions are in Prakrit, region by region, they gradually change to Sanskrit. Also while the early Pallava inscriptions are in Prakrit, the later ones are in Sanskrit. Nowhere does one see a shift from Sanskrit to Prakrit in India”

We know that the earliest available Brahmi inscriptions were all in the Prakrits, and Tamil-Brahmi inscriptions are all in Tamil. That means that literacy was always in the local language, the only

33 Sheldon I. Pollock “The language of the Gods in the World of Men”

34 Sanskrit and Prakrit Madhav M Deshpande

exceptions being early inscriptions in Andhra Pradesh, which were in Prakrits and not Telugu. We can assume that a similar scenario existed earlier as well, because Sanskrit may have been re-popularized only to take on the threats of Buddhism and Jainism, and this idea would even reinforce our acculturation model very well. The safest assumption to make was that alphabetic scripts were introduced in Post-Harappan India in a mercantile context, and may have had some administrative usage too, given that not all the kingdoms of the Gangetic plains were small, though none could compare to the extent and the glory of the Maurya empire, and that these may have only later passed into the hands of the priests, which meant that they were used to write Prakrits not Sanskrit.

The direction of writing

The direction of writing can give us no major clues as to the origin of scripts in India; The Indus script was written from right to left. Proto-Canaanite inscriptions were written usually from right to left, but were often boustrophedonic. Kharoshthi was generally written from right to left, with minor exceptions. Brahmi was usually written from left to right, with some exceptions. It can however prove that the derivation of Brahmi from Kharoshthi becomes much more difficult, and this is anyway impossible for several other important reasons.

Indus scripts in post-Harappan contexts

Examples of Indus scripts have recently been found or claimed in places as far apart as Daimabad in Maharashtra (this example dates to 1800 BC) Vaisali in Bihar, and Mayiladuthurai in Tamilnadu, all in the post Harappan period, pertaining to periods between 1500 and 1100 BC.³⁵ This would suggest that there was some continuity in tradition between the Harappan and the post-Harappan period and that some literate traditions may have been retained by the Indo-Aryans and other cultures. This would also suggest that the Harappan script did indeed have some uses outside the context of the IVC. More recently, Iravatham Mahadevan has claimed the discovery of an urn in Sular on the outskirts of Coimbatore pertaining to 100 BC, containing a script, which, he claims, may be related to the Indus script^{36 37}.

Transmission of the Indus script to post-Harappan India

From the above evidence, we know that the Indus script was certainly used after 1900 BC in the Gangetic plains after the transfer of populations to the Ganga-Yamuna doab and more evidence for this can come as archeological data expands in the always-difficult-to-research Gangetic plains.

The early import of alphabetic scripts from after 1700 BC and its usage by small sections of society may have served as a disincentive for the use of the Indus script but it does not mean that it could not have been used in parallel as logo-syllabic scripts with a large number of word-signs can have advantages over alphabetic scripts in specific contexts, as they could have been read by people speaking many different languages without having to learn the underlying language, and Post-Harappan cultures like the Indus were known to have been polyglot and multi-linguistic.

Buhler's conclusions

Buhler continued exploring the Brahmi-Kharoshthi conundrum and other puzzles involving the origin of the Brahmi script.

“As long as theories regarding the derivation of the Brahma script contain equations like those just mentioned, as and long as these theories do not take into account all the oldest forms of the Indian

35 "Discovery of a century" in Tamil Nadu by T.S. Subramanian *The Hindu* May 01, 2006

36 *The Indus Script: A Challenging Puzzle* by Asko Parpola *World Archaeology*, Vol. 17, No. 3, *Early Writing Systems* (Feb., 1986), pp. 399-419

37 *A megalithic pottery inscription and a Harappa tablet, a Case of extraordinary resemblance*, Iravatham Mahadevan

letters, the problem, it seems to me, has not been redone. Really trustworthy results can be obtained under the following conditions.

- (1) The comparison must be based on the oldest forms of the Indian alphabet and actually occurring Semitic signs of one and the same period.
- (2) The comparison may include only such irregular equations, as can be supported by analyses from other cases, where nations have borrowed foreign alphabets.
- (3) The comparison must show that there are fixed principles of derivation.”

We would also like to state that while these conclusions were made many decades ago, his conclusions are valid even today, and it would be necessary always, to guard against over-simplification.

The context of introduction of alphabetic scripts into India

Therefore, the context of introduction of alphabetic scripts into India is as follows, and this would seem to tally with the observations of most mainstream scholars:

Date	Context	Usage
1700 BC	Was imported by one of the newly emerging larger kingdoms of the Gangetic plains along with knowhow for Chariots and Iron (refer our model) when the technology already existed in West Asia	Mercantile, very small groups of people perhaps
1700 BC -1500 BC	Rapid indigenization (See Bet Dwaraka evidence)	Mercantile, some administrative usage, very small groups of people perhaps
Sometime between 1300 BC – 800 BC	May have passed over into the hands of a few priests. The date range specified here is highly provisional. However, all religious traditions were still transmitted orally.	The priests may have begun the process of modifying it
600 BC and later	Renaissance throughout the subcontinent due to reasons discussed in the paper	Leads to faster spread of writing

Why it is time to revise all current theories regarding the origin of Brahmi

We will now examine in brief why it is time to revisit all theories regarding the origin of Brahmi, and explain why these have already become outdated.

Reason # 1 Current theories on the origin of Brahmi are based on outdated theories of the origin of alphabetic scripts.

Reason # 2 Current theories on the origin of Brahmi are based on obsolete theories such as early Second millennium migrations which few mainstream scholars will be willing to subscribe to at this late date.

Reason # 3 Current models are based on obsolete Nineteenth century theories such as rural-Post Harappan India hypotheses which few mainstream scholars will be willing to subscribe to at this late date.

Reason # 4 Current models are based on older versions of the AMT, and we now know that contacts with West Asia were crucial for the formation of the cultures of the Gangetic plains.

Reason # 5 Revising Theories to bring them in line with latest models can have a bearing on the research of alphabetic scripts in general.

Reason # 6 Earlier theories regarding the origin of the Brahmi alphabet were so full of paradoxes that even mainstream scholars, many of them Western, have tended to swing towards the indigenous Brahmi theory. Bringing theories uptodate can enable a consensus to be reached.

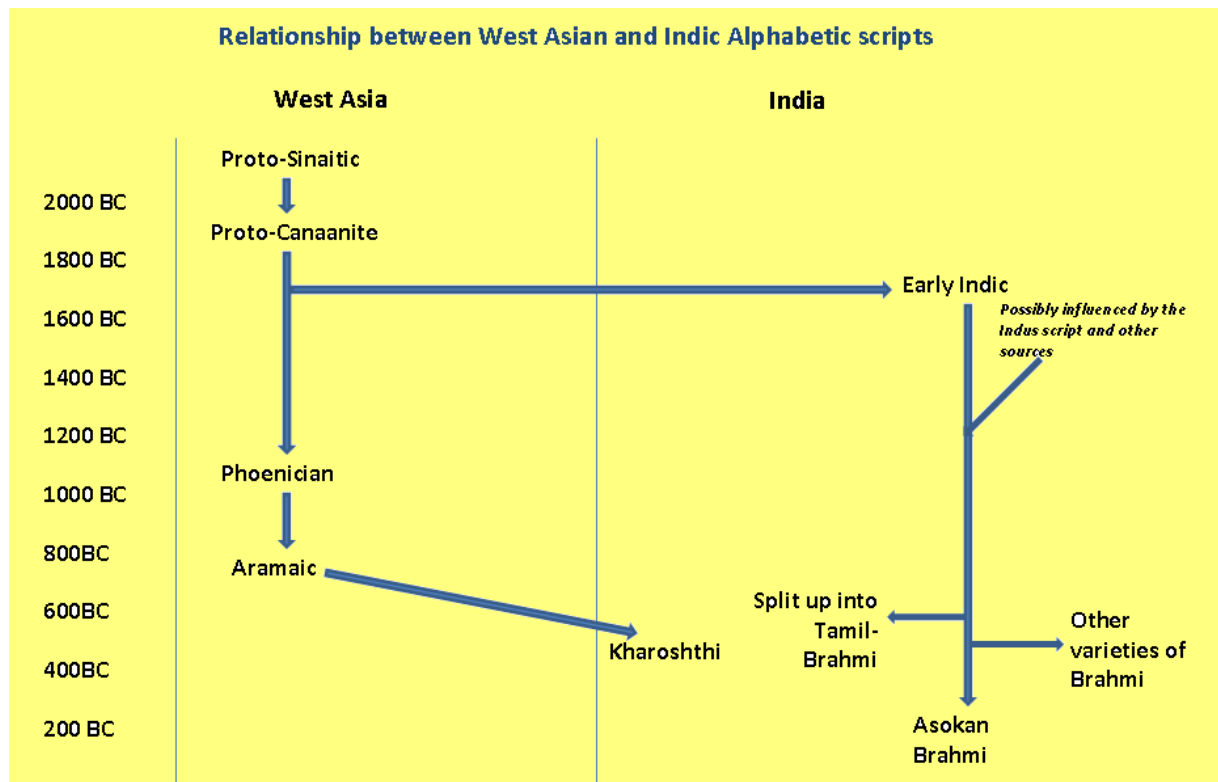


Fig 11 A diagram showing the relationship between West Asian alphabetic scripts and Indic alphabetic scripts per our model. Scholars who do not wish to agree must offer a systematic refutation of all the points raised in this paper

An evaluation of other theories

The theory that Brahmi had an indigenous origin has been supported by many mainstream scholars such as Alexander Cunningham, John Marshall and the Allchins

Jack Goody states commenting on Raymond Allchin's communication in which Allchin stated: ³⁸

“ There is a powerful argument against the idea that the idea that the Brahmi script was derived from a Semitic borrowing. The whole structure and conception of the script and must, in my view, have had an independent genesis. When an attempt was made to adapt the Aramaic script to writing an Indic language, the Aramaic character was retained and continued to dominate the script for many centuries. Yet, in the attempt, there is a clear Brahmi influence discernable; therefore, I have always thought, the Brahmi script must have been there before the arrival of the Aramaic. In recent years, I have been leaning

³⁸ The pre-historic background of Indian culture, Douglas Hamilton Gordon, Buhlabhai memorial Institute, Mumbai 1960

towards the view that the Brahmi script had an independent origin, probably emerging from the breakdown of the old Harappan script perhaps in the first half of the second millennium.”

Likewise, John Marshall rejected the idea that Brahmi was derived from Aramaic. His very detailed defense of an indigenous origin of Brahmi can be found in the book “Mohenjodaro and the Indus civilization” in which he attempted to compare Brahmi with the Indus script on a sign by sign basis. Readers can read his comparison for themselves and decide how convincing his explanation is.

The problems with the indigenous theory are as follows:

- It fails to explain the similarities between Brahmi and the early West Asian scripts convincingly
- It fails to explain why people would have had to reinvent the wheel when alphabetic scripts were already available in West Asia, and when India was in contact with West Asia, the easier option would have been to import scripts and modify them for local needs.

However, the Indus script may have influenced the development of Brahmi and scholars may still wish to carry out a sign by sign comparison. The fact that it was primarily derived from a West Asian source does not mean that it did not have an indigenous component. As a matter of fact, John Marshall stated, defending his own theory, that if one studied Buhler’s detailed defense of a Phoenician origin of the Brahmi script in his ‘origin of the Indian Brahma alphabet’ he would find only two letters which would warrant anything like a satisfactory comparison, gimel and teth. This comparison has now been achieved for other letters, but scholars may still look for contradictory evidence, which will point to a more complex picture of the origin of Brahmi.

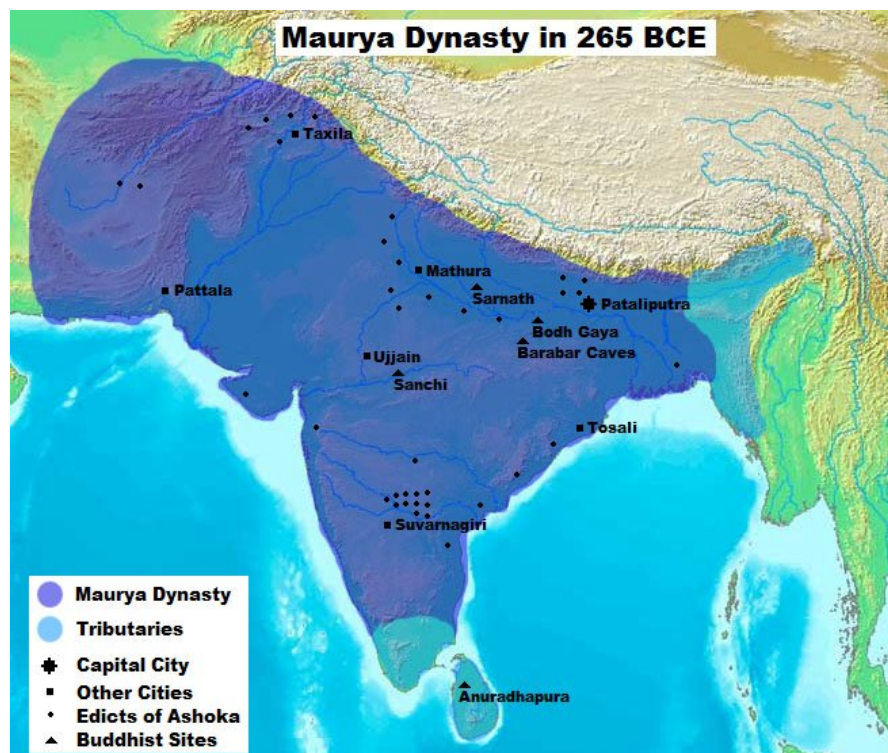


Fig 12. Map showing the Mauryan empire at its peak in 265 BC. While literacy spread throughout India at this time, the theory that alphabetic scripts did not exist at an earlier date is simply untenable due to the factors discussed in the paper. Archeological evidence in the Gangetic plains is also hard to find.



Fig 13. Potsherd with Tamil-Brahmi characters. Several examples of Tamil-Brahmi have been found dating to well before the Christian era in Tamilnadu and Sri Lanka

Conclusion

There was a renaissance in around 600 BC but this does not mean that alphabetic scripts were not imported earlier. As a matter of fact, literacy certainly existed as evidenced by the continued usage of the Indus script and the Bet Dwaraka inscription as well. In our previous paper we discussed the spread of a Pan-Indian ideology in or sometime after 600 BC, and this spread may have happened on account of many factors, some of them being

1. The emergence and spread of Jainism and Buddhism: Writing was brought to South India, by Jain and Buddhist scholars as a result of the spread of Jainism and Buddhism to these regions. As these movements were opposed to Vedic Brahmanical Hinduism, these new faiths chose to avoid the usage of Sanskrit completely and conducted their missionary activities in North India in the local Prakrit dialects, and in South India in South Indian languages. They had no vested interests in maintaining the oral traditions like the Vedic priests had, nor any bias against writing down their scriptures in the local language.
2. The unification of India under the Mauryas and the spread of writing as a result of the spread of the Mauryan empire. This kind of all-India unity was not achieved again until the time of Emperor Aurangzeb. Thus, until around 600 BC, there were perhaps very little contacts between the Aryavarta and the South of India, and even those contacts which as attested to in both the epics are unreliable because additions were made to the Ramayana and the Mahabharata between 200 BC and 200 AD.
3. The rivalry between Buddhism and the Vedic orthodoxy leads to the spread of both Buddhism and the Vedic religion across India. The rivalry between Buddhism and the Vedic orthodoxy also leads to the spread of both Prakrits and Sanskrit across India

This renaissance would have lead to a faster spread of writing and a diversification of scripts across the region. This does not however preclude the existence of writing at an earlier date and only suggests that while writing did indeed spread after 600 BC, contradictory evidence must always be searched for, (we may recall our principle here: avoid oversimplification and look for contradictory evidence always) and a rational assessment will reveal that literacy almost certainly must have existed earlier (much earlier) in the Aryavarta, as has already been proved by the data presented above, given that towns and cities certainly existed there, even if it was restricted to small sections of society, and we may use the principle of reflective equilibrium, always our Swiss Army knife, here. In order words, if contradictory evidence exists, it means that the model is oversimplified. Similarities with later West Asian alphabetic scripts (if at all any) can be explained as a result of later contacts with the region, but the split-up between the two clearly happened at the time indicated in the paper.

As a matter of fact, the introduction of Brahmi just before, in or after 600 BC, or even a few centuries before this, is highly unlikely and implausible. As the logic and reasoning is presented above, readers may exercise their own judgment, and those who wish to believe that alphabetic scripts were introduced in India with the Archaemenids must make special entreaties and pleas. But as so much contradictory evidence is now available, such notions, always controversial and with very little mainstream backing ever, lead to very serious paradoxes and fundamental errors of logic and may now fall on completely deaf ears and may be tossed over into the rubbish heap of history. It must be stated here that a large number of scholars, most mainstream and Western, have already rejected this notion outright, and the somewhat more plausible but still controversial theory has been its derivation from the earlier Aramaic, an idea which has had its fair share of detractors. We have in this paper, refuted this hypothesis too, and have proposed an alternative model for the origin of Brahmi, and have arrived at a very clear set of dates. Indeed (a) Research on the Gangetic plains before 600 BC has already become mainstream but more research is necessary preferably using India-specific research strategies and multi-disciplinary approaches before any meaningful conclusions can be drawn (b) similarly, more research between the North and South of India is required to understand why and how scripts may have spread (c) more research between the Gangetic plains and the North West of India is required throughout the ages (d) More research between Gangetic plains and West Asia is required before a greater degree of precision than what was arrived at in this paper is possible. Few may however be able to find fault with the general parameters and the fairly detailed outline of the origin of Brahmi presented in this paper, as we have as always, adopted a multi-disciplinary and a very transparent and figure-it-out-for-yourself approach. This will warrant some changes to history textbooks. Those who feel convinced by it must explain it to other scholars as well.